UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ANYA, CHARLES E

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/657,579	HILL ET AL.
	Examiner	Art Unit
	Charles E. Anya	2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 September 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-37</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-37 are pending this application.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 33-37 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

The following terms lack antecedent basis:

         i.   "the system" on line 1 of claims 33-37.

For the purpose of this office action the Examiner would change "the system" to

"the computer system".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-23 and 31-37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Pub. No. 7,159,579 B2 to Sharma et al. in view of U.S. Pub.

No. 2005/0223392 A1 to Cox et al.

5.   As to claim 1, Sharma teaches a method of accessing an Enterprise Java Bean

(EJB) by a non-Java application within a computing environment, comprising: a) calling

a client library (Client Side Runtime System 134) by the non-Java application ("...client

side proxy..." Col. 7 Ln. 56 – 67, "...javax.xml.rpc.Serviceinterface...dynamically

proxy..." Col. 8 Ln.12 – 53); b) invoking a function within the client library to construct an

HTTP request corresponding to the calling input parameters from the non-Java

application (Client Side Runtime System 525 "Steps 650/670" Col. 23 Ln. 16 – 33, Ln.

52 – 58); c) passing the HTTP request from the client library to an EjbServlet/d) invoking

a method on an EJB by the EjbServlet based upon the HTTP request ("...servlet

container...HTTP requests...call a method..." Col. 6 Ln. 1 – 26, "...transported..." Col.

23 Ln. 58 – 61, Step 740 Col. 24 Ln. .21 – 31); e) returning information from the invoked

method from the EJB to the EjbServlet ("... component's generation of a response..."

Col. 6 Ln. 1 – 12, "...generate response..." Col. 24 Ln. 30 – 40); decoding the returned

information into an HTTP response string by the EjbServlet ("...produces a response..."

Col. 6 Ln. 16 – 17, "...deserializers..." Col. 22 Ln. 5 – 8); and g) transmitting the HTTP

response from the EjbServlet to the client library ("...serve the content..." Col. 6 Ln. 21

– 26, Container 560 "Steps 750/760" Col. 24 Ln. 33 – 40).

Sharma is silent with reference to parsing the HTTP response by the client library into return information compatible with the non-Java application and then passing the return information from the client library to the non-Java application.

Cox teaches parsing the HTTP response by the client library into return information compatible with the non-Java application and then passing the return information from the client library to the non-Java application (Adapter 102 page 14 paragraphs 0234/0245).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sharma with the teaching of Cox because the teaching of Cox would improve the system of Sharma by providing programmatic code that simplifies the parsing, storing, and retrieval of elements and attributes against a tagged data format document by shielding the low-level mechanics of actions from users (Cox page 14 paragraph 0234).

6.   As to claim 2, Sharma teaches the method of claim 1 wherein the invoked method is a chained method ("...remote method call...remote call..." "Step 740" Col. 23 Ln. 53 – 67, Col. 24 Ln. 14 – 32).

7.   As to claim 3, Sharma teaches the method of claim 1 wherein the invoking a method on the EJB by the EjbServlet further comprises passing one or more input parameters by the EjbServlet to the EJB ("...provide context data (i.e., session sate and information about the request..." Col. 6 Ln. 8 – 13).

8.   As to claim 4, Sharma teaches the method of claim 3 wherein the input

parameters comprise one or more input objects constructed by the EjbServlet based on

the HTTP request ("...provide context data (i.e., session sate and information about the

request..." Col. 6 Ln. 8 – 13).

9.   As to claim 5, Sharma teaches the method of claim 1 wherein the returning

information from the invoked method from the EJB to the EjbServlet further comprises

the EJB constructing a return object based upon the information form the invoked

method and passing the return object to the EjbServlet ("...produces a response..." Col.

6 Ln. 11 – 17).

10.   As to claim 6, Sharma teaches the method of claim 5 wherein the return object is

a chained object ("...the container may return the content...serve the content..." Col. 6

Ln. 11 – 26).

11.   As to claim 7, Sharma teaches the method of claim 5 wherein the decoding the

returned information into an HTTP response string by the EjbServlet further comprises

decoding the return object into an HTTP response string by the EjbServlet ("...produces

a response..." Col. 6 Ln. 16 – 17, "...deserializers..." Col. 22 Ln. 5 – 8).

12.   As to claim 8, Sharma teaches the method of claim 1 wherein the HTTP request

and the HTTP response each comprise a series of bytes representing HTTP-specific

control information or text strings ("...HTTP request..." Col. 23 Ln. 52 – 67, "...HTTP

response..." Col. 24 Ln. 32 – 40).

13.   As to claim 9, Sharma teaches the method of claim 8 wherein the HTTP request

and the HTTP response are passed between the client library and the EjbServlet via an

HTTP protocol (Col. 6 Ln. 1 – 26, "...HTTP request...HTTP transport..." Col. 23 Ln. 52

– 67, "...HTTP response..." Col. 24 Ln. 32 – 40).

14.   As to claim 10, Sharma teaches the method of claim 9 wherein the HTTP

protocol enables the client library and EjbServlet to communicate across a distributed

computing environment (Col. 6 Ln. 1 – 26, "...HTTP request...HTTP transport..." Col.

23 Ln. 52 – 67, "...HTTP response..." Col. 24 Ln. 32 – 40).

15.   As to claim 11, Cox teaches the method of claim 1 wherein the non-Java

application is based on a programming environment capable of calling external library

functions via the C calling convention ("...Visual C++...C# language..." page 4

paragraph 004, page 8 paragraph 0174).

16.   As to claim 12, Cox teaches the method of claim 1 further comprising the non-

Java application allocating buffers to hold calling input parameters sent to the client

library and return information received from the client library ("...asynchronous...EJB

integration..." page 17 paragraph 0275).

17.   As to claim 13, Sharma teaches the method of claim 1 wherein the client library

is a linkable library ("...JAX-RPC library..." Col. 7 Ln. 31 – 55).

18.   As to claim 14, Cox teaches the method of claim 1 wherein the calls between the

client library and the non-Java application are based upon the C language calling

convention ("...Visual C++...C# language..." page 4 paragraph 004, page 8 paragraph

0174).

19.   As to claim 15, Sharma teaches the method of claim 1 further comprising the

client library converting any numeric input parameter in the calling input parameters into

a corresponding text representation in the HTTP request ("...translate requests..." Col.

6 Ln. 1 – 26, "...mapping..." Col. 23 Ln. 16 – 33).

20.   As to claim 16, Sharma teaches the method of claim 12 further comprising the

client library extracting the return information from the HTTP response sent by the

EjbServlet and placing the return information into the buffers provided by the non-Java

calling application ("...translate requests..." Col. 6 Ln. 1 – 26, "...mapping..." Col. 23 Ln.

16 – 33).

21.   As to claim 17, Sharma teaches the method of claim 16 further comprising the

client library converting any text-represented numeric value extracted from the HTTP

response into a corresponding numeric form thereof ("...translate requests..." Col. 6 Ln.

1 – 26, "...mapping..." Col. 23 Ln. 16 – 33).

22.   As to claim 18, Sharma teaches the method of claim 1 wherein the EjbServlet

and the method invoked on the EJB is identified by a calling input parameter embedded

in the HTTP request ("...call a method..." Col. 6 Ln. 17 – 24).

23.   As to claim 19, Cox teaches the method of claim 1 wherein the method is

invoked via a remote method invocation (RMI) protocol ("...RMI..." page 6 paragraph

0091, page 10 paragraph 0193).

24.   As to claim 20, Sharma teaches the method of claim 19 wherein the RMI enables

the EjbServlet and the EJB to communicate across a distributed computing environment

("...RMI..." page 6 paragraph 0091, page 10 paragraph 0193).

25.   As to claim 21, Cox teaches the method of claim 12 wherein the return

information is placed into two buffers ("...asynchronous...EJB integration..." page 17

paragraph 0275).

26.   As to claim 22, Cox teaches the method of claim 21 wherein the buffers comprise

a data buffer and a format buffer. ("...asynchronous...EJB integration..." page 17

paragraph 0275).

27.   As to claim 23, Sharma teaches the method of claim 22 further comprising

passing additional decoded return information wherein the information from the invoked

method exceeds the data buffer capacity, the format buffer capacity, or both

("...deserializiers..." Col. 23 Ln. 8 – 9).

28.   As to claim 31, Cox teaches the method of claim 1 further comprising invoking a

logging function within the client library ("Logging..." page 10 paragraph 0194).

29.   As to claims 32,36 and 37, see the rejection of claims 1,19 and 20 above.

30.   As to claims 33-35, see the rejection of claims 3,5 and 8 respectively.

31.   Claims 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pub. No. 7,159,579 B2 to Sharma et al. in view of U.S. Pub. No.

2005/0223392 A1 to Cox et al. as applied to claim 23 above, and further in view of

U.S. Pub. No. 2006/0036448 A1 to Haynie et al.

32.   As to claim 24, Cox and Sharma are silent with reference to the method of claim

23 wherein the EjbServlet stores the remaining decoded EJB method call results in

memory.

Haynie teaches the method of claim 23 wherein the EjbServlet stores the

remaining decoded EJB method call results in memory ("...caching..." page 11

paragraph 0149).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Cox and Sharma with the teaching of

Haynie because the teaching of Haynie would improve the system of Cox and Sharma

by providing programmatic code that listens for messages form a client, makes the

requested EJB call for the client, and then return the results (Haynie page 11 paragraph

0149).

33.   As to claim 25, Haynie teaches the method of claim 23 wherein the client library

passes a return code to the non-Java application indicating that information from the

invoked method remains in the EjbServlet ("...METHOD CALL RESPONSE..." page 11

paragraph 0154).

34.   As to claim 26, Haynie teaches the method of claim 23 wherein additional return

data and format strings are passed until all of the decoded information from the invoked

method is received by the non-Java application ("...METHOD CALL RESPONSE..."

page 11 paragraph 0154).

35.   As to claim 27, Haynie teaches the method of claim 23 wherein the EjbServlet

passes a key to the client library identifying any information from the invoked method

remaining in the EjbServlet ("...object ID parameter..." page 11 paragraph 0149).

36.   As to claim 28, Haynie teaches the method of claim 27 wherein the client library

places the key in a session ID parameter ("...object ID parameter..." page 11 paragraph

0149).

37.   As to claim 29, Haynie teaches the method of claim 28 wherein the client library

provides the key to the non-Java application ("...object ID parameter..." page 11

paragraph 0149).

38.   As to claim 30, Haynie teaches the method of claim 29 wherein non-Java

application accesses the information from the invoked method remaining in the

EjbServlet using the key ("...object ID parameter..." page 11 paragraph 0149).

Conclusion

       The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

       U.S. Pub. No. 2005/0149914 A1 to Krapf et al.: directed to sharing components

between programming languages.

J.P. No. 2000250768 A: directed to a system for calling method of a server object.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is 571-272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cea.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER